



2013-2014 Presentation of Nominee to the U.S. Department of Education
Green Ribbon Schools Program
The DC Office of the State Superintendent of Education

Woodrow Wilson High School

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PART I - ELIGIBILITY CERTIFICATION

School and District's Certifications

The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of their knowledge. *In no case is a private school required to make any certification with regard to the public school district in which it is located.*

1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)
2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review.
4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

For Public Schools only: [] Charter [X] Title I (Targeted Assistance) [] Magnet [] Choice

Name of Principal Mr. Peter J. Cahall
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official School Name Woodrow Wilson High School

School
Mailing Address 3950 Chesapeake St., NW

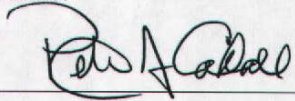
Washington, DC 20016
State Zip

County n/a State School Code Number* College Board Code 090230

Telephone (202) 282-0120 Fax (202) 282-0077

Web site/URL www.wilsonhs.org E-mail Peter.Cahall@dc.gov

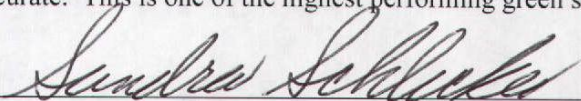
I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

 Date 1/28/2013
(Principal's Signature)

Name of Deputy Superintendent of Education * Dr Sandra Schlicker
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

District Name* District of Columbia Public Schools Tel. (202) 442-5885

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate. This is one of the highest performing green schools in my jurisdiction.

 Date 2/12/13
(Deputy Superintendent's Signature)

PART II – SUMMARY OF ACHIEVEMENTS

Woodrow Wilson High School has taken great strides to become one of Washington, DC's greenest schools through:

- Compliance with the DC Healthy Schools Act which supports the Green Ribbon Schools Program by:
 - Enhancing nutrition of school meals by including more whole grains, a variety of fresh fruits and vegetables, less fat, and less sodium
 - Serving locally-grown, unprocessed foods in school meals whenever possible
 - Ensuring that farm-fresh foods are grown sustainably whenever possible
 - Participating in at least one Farm to School educational program each year
 - Expanding Physical Education
 - Developing a Local Wellness Policy team to help shape the school's wellness policy
 - Implementing of an Integrated Pest Management Plan which reduces pesticide use
- Constructing a Gold LEED 2012 certified building
- Achieving a 74% reduction in water use
- Utilizing A 30,000 gal storm water tanks that manages storm water runoff
- Successfully supporting 80% of the student population to walk, bike or take public transportation to and from school
- Offering a career education program in environmental science.

PART III – DOCUMENTATION OF STATE EVALUATION OF NOMINEE

Instructions to Nominating Authority

The Nominating Authority must document schools' high achievement in each of the three ED-GRS Pillars and nine Elements. For each school nominated, please attach documentation in each Pillar and Element. This may be the Authority's application based on the Framework and sample application or a committee's written evaluation of a school in each Pillar and Element.

Nominating Authority's Certifications

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)
2. The school is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
3. The school meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: Office of the State Superintendent of Education

Name of Nominating Authority Dr. Sandra Schlicker
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.

Sandra Schlicker Date 2/12/13
(Nominating Authority's Signature)

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to green.ribbon.schools@ed.gov according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509

Expiration Date: February 28, 2015

Public Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

Documentation:

School Contact Information:

WOODROW WILSON HIGH SCHOOL -DISTRICT OF COLUMBIA PUBLIC SCHOOLS
3950 Chesapeake Street, NW
Washington, DC 20009

Ward: 3 www.wilsonhs.org

Principal Peter J. Cahall

Principal Email Address: pete.cahall@dc.gov Phone Number: 202-282-0120

Lead Applicant Name (if different): Alex Wilson

Lead Applicant Email: alex.wilson@dc.gov Phone Number: 202-258-7273

Grade Level: ☐ K-6 ☐ 7-8 ☒ 9-12

School Type: ☒ Public ☐ Independent ☐ Charter

% Free/Reduced Lunch 35%

Cross Cutting Question (5%):

Woodrow Wilson High School completed an extensive \$110 million modernization using an “adaptive reuse” architectural design framework. We returned to the campus on August 1, 2011. On September 11, 2012 we celebrated our designation as a Gold LEED certified campus.

The modernized campus has been used as a teaching tool for students and the community at large. All Science teachers have received the Green Tour Guide and are incorporating the building into class lessons throughout the year. In August 2011, over 35 Wilson Tigers were trained in all the LEED elements of their new campus and they have since hosted over 3,200 local residents, students and families on green tours. These tours included the 1961, 1965 and 1971 Class Reunions. These reunion groups were thrilled at how much of the spirit and structure of the old campus had been preserved in the modernized facility. They marveled that the original 1935 terrazzo floors had been matched by modern artisans who created the same flooring in most of the 70,000 square feet of new space.

The “Green Tour” student guides pointed out the two green roofs. The walked visitors through the 75 year old coal and oil burning three story power plant that had been converted into a highly efficient smaller scale natural gas power system. In fact the modernized power plant saved so much space we were able to convert one story of it to a state of the art fitness center, now called “The Power House”. One remaining question...What shall we do with the now dormant 70 foot smokestack...maybe a climbing wall?

The most dramatic transformative feature of the modernized campus is the Atrium of the core academic building (see photo). Since 1935 this building had an 11,000 square foot open-air doughnut hole in the middle that was dead space. Its only purpose was to provide air circulation from the hot swampy DC climate from May-September. A spectacular customized concave glass roof was installed creating the Atrium - the

centerpiece of the school. The Atrium has hosted a 75th Anniversary Gala, an Arts & Music Festival, our 2011 Homecoming Dance and the Regional Kickoff of the 2012 FIRST Robotics Competition. In keeping with LEED criteria, The Atrium is bathed in natural light and has fantastic acoustical treatments and a sophisticated directional sound system.

Two water holding systems were designed. One is a 15,000 gallon cistern that holds rain water and is used to flush 56 toilets and 18 urinals in the main academic building. Another 38,000 gallon stormwater management system controls much of the storm water runoff from our property, which is at DC's highest point. This prevents water pollution of Rock Creek, the Potomac River and ultimately the Chesapeake Bay, one of the world's most fragile ecosystems.

Wilson is proud of the new main gym and an auxiliary gym that needs only natural light to operate most days. The new auditorium uses 850 hardwood seats preserved from the original 1935 auditorium. Visitors marvel at the wonderful blend of old and new. The auditorium, which was created from the old gymnasium, was built using the original steel superstructure. Most classrooms shine with the refurbished original wooden floors and the best in new MAC, PC, Promethean and LCD technologies.

Academically, the campus redesign offers a multitude of gifts. It boasts a 2,400 square foot Engineering and Robotics lab that houses classes in Civil Engineering, Computer Integrated Manufacturing, Electrical Design and Engineering and Robotics. An EcoLab that creates any ecosystem on earth and allows for creative environmental studies. Wilson's MAC labs allow for an amazing blend of arts and technology. Wilson's first ever TV studio produces 6 minutes of daily announcements and student documentary pieces. The Black Box Theater, another first, enhances our highly-regarded theater program with a space for experimental theater, open mikes, slam poetry, comedy gigs, debate and oratory competitions. Renovations also provided a large formal band and orchestral rehearsal studio along with four smaller rehearsal studios where solo or small acts can record.

Wilson's campus location and design allow for smart transportation choices by all 1800 plus students and staff. The campus is located one block from a metro stop and bus hub. Staff coordinated with the Washington Area Bicycle Association to have bike racks installed in a secured garage with incentives provided for bike transportation. A joint initiative of Wilson's Environmental Science Sustainability Program and the Wilson International Studies Program has launched a school-wide recycling program with a contract for a comingled recycling dumpster and a school wide composting effort in collaboration with our food service provider.

The entire Wilson community is thankful and proud of the modernized facility. Everyone has stepped up their game. Wilson Principal Pete Cahall is a data hound, and he has noted that student attendance is up, truancy is reduced, and clubs and sports teams have increased participation. Overall GPAs are rising slightly and there are fewer failing grades. There are fewer student altercations because design changes broke up congested hallways and bottlenecks. For example, one story passageways between buildings were converted to three story passageways.

We are a Tiger Pride of 1729 scholars. Our modernized campus amplifies that Wilson Tigers are proud **and green**.

1. Is your school participating in a D.C. or national school program which asks you to benchmark progress in some fashion in any or all of the Pillars?

X Yes ☐ No Program(s) and level(s) achieved: National School Lunch Program, DC Healthy Schools Act

2. Has your school, staff or student body received any awards for facilities, health or environment?

X Yes ☐ No Award(s) and year(s):

Gold LEED Certification awarded September 11, 2011

United States Green Building Council

Eco-School Certification 2012

National Wildlife Federation

Pollinating Garden Grant Recipient

The Nature Conservancy 2012

2012 Craftsmanship Award

Washington Building Congress

Historic Preservation Officer's Award

DC Historic Preservation Office + DC Preservation League, 2011

2012 Lee J. Brockway Award Winner for Renovation/Addition

Council for Education Facilities Planners International

Outstanding Design in Renovation/Modernization

American School + University, 2012

Award of Merit, Historic Resources

American Institute of Architects, Washington, DC Chapter, 2012

Award of Excellence, Best Renovation, Historic Restoration

NAIOP Commercial Real Estate Development Association, 2012

Pillar I: Reduced Environmental Impact and Costs (30%)

Element 1A: Energy

1A. Please provide past 12 months of gas and electricity usage:

Can your school demonstrate a reduction in Greenhouse Gas emissions? ☒ No

How did you calculate the reduction?

There is insufficient data to demonstrate a reduction in Greenhouse Gas emissions. Available data indicates that total energy usage has increased by more than 50% when compared to a pre-renovation baseline. This would be associated with an overall increase in greenhouse gas emissions.

However, this comparison does not reflect the fact that the building is now serving functions beyond that of a

typical school. For example, it does not take into account increased operating hours for evening classes and community uses that are now popular due to the attractiveness of the building; nor that kitchen now supplies food for seven other schools using energy-efficient appliances. These additional uses include 45 clubs and extracurricular activities, 6 non-profit organizations, 20 varsity and junior varsity sports, 20 club sports, and 4-8 American University graduate school classes.

A more appropriate comparison would be to use a post-renovation baseline, which is not yet possible since only one year of data is currently available.

Past 12 months of gas and electricity usage

| Month | Gas use (Therms) | Electricity Use (KWh) | Total (MBTU) |
|-----------------------|-----------------------------|----------------------------------|-------------------------|
| Oct-11 | 10,539 | 458,846 | 2,620 |
| Nov-11 | 20,511 | 443,350 | 3,564 |
| Dec-11 | 27,074 | 458,128 | 4,271 |
| Jan-12 | 40,035 | 456,966 | 5,563 |
| Feb-12 | 30,902 | 427,343 | 4,548 |
| Mar-12 | 19,260 | 427,279 | 3,384 |
| Apr-12 | 13,672 | 238,484 | 2,181 |
| May-12 | 865 | 548,364 | 1,958 |
| Jun-12 | 2,663 | 557,764 | 2,169 |
| Jul-12 | 2,204 | 346,696 | 1,403 |
| Aug-12 | 1,469 | 541,928 | 1,996 |
| Sep-12 | 33 | 471,375 | 1,612 |
| Total FY12 | 169,227 | 5,376,523 | 35,268 |

Source: DC Department of General Services, compiled from electricity and gas bills.

2A. Has your school received EPA ENERGY STAR certification or does it meet the requirements for ENERGY STAR certification? ☒ No Year(s) and score(s) received:

The school has not yet received EPA ENERGY STAR certification. However it is actively pursuing ENERGY STAR certification for 2013. Data has been collected and entered into the Portfolio Manager system managed by the DC Department of General Services (DGS). The current score does not exceed 75. However, now that the building's high energy intensity has been calculated, the school can work with DGS to identify steps to improve building performance.

3A. Has your school reduced its total non-transportation energy use from an initial baseline? ☒ No

Current energy usage (kBTU/student/year): 20,398

Current energy usage (kBTU/sq. ft./year): 93.67

Percentage reduction: ___over (m/yy - mm/yy): _____ N/A

How did you document this reduction? See questions 1A and 2A

4A. What percentage of your school's energy is obtained from (Note: All DCPS Schools purchase X% of renewable energy):

On-site renewable energy generation: Type: Solar ☐ Wind ☐ Geothermal

Purchased renewable energy: 100% Type: ☐ Solar ☒ Wind ☐ Geothermal ☐ Other _____

Does your school participate in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy programs? ☒ No If yes, name the program(s): _____

5A. What year was your school originally constructed? 1935 What is the total building area? 376,507 sq. ft

6A. Has your school constructed or renovated building(s) in the past ten years? X Yes ☐ No

For new building(s):

Total constructed area: 105,207 Does this building meet green building standard? ☒ Yes ☐ No Certification and level: Gold LEED 2012 For renovated building(s): Total renovated area: 271,300 Does this building meet green building standards: ☒ Yes ☐ No Certification and level: Gold LEED 2012

For renovated building(s):

Total renovated area: 376, 507 sq. ft. Does this building meet green building standards: X Yes ☐ No Certification and level: Gold LEED Certification – USGBC September 11, 2012.

Element 2A: Water and Grounds

7A. Can you demonstrate a reduction in your school's total water consumption from an initial baseline? ☒ Yes ☐ No

Average Baseline water use (gallons per occupant): 29

Current water use (gallons per occupant): 7

Percentage reduction in domestic water use: 74%

Percentage reduction in irrigation water use: n/a

Time period measured (mm/yyyy - mm/yyyy): 10/2009 - 9/2012

For this calculation consumption is considered to refer to purchased water, not to collected rainwater which is used to fulfill many of the school's water uses including flushing toilets and irrigation.

Data from water bills from all meters servicing the location for the time period above were collected from DGS. These calculations were done using the occupancy data from FY12 and data from water bills from FY09-12. The baseline water use was calculated as the average gallons/occupancy of FY09-10. See Attachment 2 for details.

8A. What % of your landscaping is considered water-efficient and/or regionally appropriate? 100%

9A. Describe any alternate water sources used for irrigation: Water for irrigation is diverted from the school's cistern when possible.

10A. Has your school participated in the District Department of the Environment RiverSmart Schools Program?

X Yes ☐ No

The campus sits atop the highest point in Washington, DC. We are extremely proud of our storm water management. We have a 30,000 gal storm water tanks that manages the runoff from the entire site when it rains. We have a 15,000 gallon rainwater cistern that flushes all 54 toilets and 18 urinals with greywater. This matters so much because storm water from big storms is the biggest polluter of the Potomac and the delicate ecosystem of Chesapeake Bay.

11A. Describe the program you have in place to control lead in drinking water. In our recent modernization all drinking water systems were tested or replaced to guarantee they were lead free. Wilson High School's water sources were tested on May 4th 2012, and received a passing score.

12A. What % of the school grounds are devoted to ecologically beneficial uses? We maintain 2 green roofs over the delivery dock and over our auxiliary gym. We will design and introduce a pollinating garden this spring. All plantings on the grounds are native and self-sustaining.

Element 3A: Waste

13A. What percentage of solid waste is diverted from landfilling or incinerating due to reduction, recycling and/or composting? Complete all the calculations below to receive points.

A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): 15 cu yd compactor x 21 x 80%

B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): 15 cu yd compactor x 4.25 x 100%

C - Monthly compostable materials volume(s) in cubic yards (food scrap/food soiled paper dumpster size(s) x number of collections per month x percentage full when emptied or collected): 0

Recycling Rate = $((B + C) \div (A + B + C) \times 100)$: 20%

Monthly waste generated per person = (A/number of students and staff): 0.13 cu yd/person

A more detailed calculation based on weight data indicates the diversion rate may be as high as 28%. However more consistent data would need to be collected in order to confirm this estimate. Fortunately, the installation of compactors has increased the potential for keeping track of this data as well as improving the efficiency of hauling services.

Currently, there is no viable large-scale composting solution in the immediate Washington-metro area. However, the District government has set aside \$600,000 in FY13 and FY 14 for the Department of General Services (DGS) and the DC Office of Planning (OP) for the construction of four sites to meet the demand for a food waste processing facility. Nevertheless, Wilson HS has begun to explore/design its future program in partnership with the DGS, which oversees school real estate assets.

Last summer, Wilson HS, in partnership with DGS, conducted a food waste assessment of cafeteria operations. Students collected and segregated compostable materials from its breakfast, lunch and afternoon supper program. In total, students collected 146 Lbs of food waste. Organic material was pulped and later on dehydrated with an average end-weight of 17 Lbs per day –resulting in an 88% reduction in waste volume.

which could potentially translate into hauling cost savings in the near future. Such analysis is helping design the school future composting program.

14A. What percentage of your school's total office/classroom paper content is post-consumer material, fiber from forests certified as responsibly managed and/or chlorine-free? Data for this is not available. A school wide student driven audit of paper usage is planned for Spring 2013.

15A. List the types and amounts of hazardous waste generated at your school:

Universal Waste and Hazardous waste removal is reported annually to the EPA. Four types of materials are labeled for continuous monitoring D001 (Ignitable- oil based paints/solvents), D002 (Corrosive – Ph < 2 or Ph > 12.5), D009 (Mercury- Fluorescent lamps or in house equipment), and D008 (Lead Based Paint). Other materials considered are pesticides, batteries, and used oil.

Wilson High School is registered with the EPA as a Conditionally Exempt Small Quantity Generator (CESQG).

Records indicate that no hazardous waste was generated for Wilson High during 2012.

Hazardous and/or Universal Waste are measured in poundage, or corresponding units of measure for liquids and gases.

Typically, a science lab will use weak or diluted HCl, Nitric and Sulfuric Acids. When chemicals are no longer in use, school personnel contact Office of Safety and Health (OSH) to request chemical removal. Any hazardous waste generated is promptly removed and records are filed in the OSH office and reported annually to EPA. The school can contact OSH to confirm types and amounts removed.

16A. Which green cleaning custodial standard is used? Green Works cleaning supplies are our standard.

What percentage of all products is certified? Unknown

What specific third party certified green cleaning product standard does your school use? Not available

Element 1D: Alternative Transportation

17A. What percentage of your students walk, bike, ride metro, or carpool (2 + student in the car) to/from school? 80% No student parking options available on school grounds or in the immediate vicinity. Students receive a transit subsidy from the DC Government.

How is this data calculated? Smart trip Metro and Bus passes issued monthly. Parking spaces utilized by staff. Monitor use of bicycle racks.

18A. Has your school implemented?

☐ Designated carpool parking stalls.

☒ A well-publicized no idling policy that applies to all vehicles (including school buses). The Office of Safety and Health has an Anti-Idling Program in place, and is currently being reviewed by DCPS administrators for use. Woodrow Wilson High School has asked to pilot this program after it is been given the green light by DCPS. Idle Free Zone signs are available for school use once the policy is

legitimized. OSH is tentatively scheduling the program roll out for early 2013. A brief description is as follows:

Gas and Diesel powered engine emissions are a significant source of pollution at the school building. Throughout the school day school buses, cars, delivery trucks, and grounds equipment emit air toxins and fine particulates that significantly affect indoor air quality. In place procedures will tremendously decrease air contaminants.

☒ Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows.

☒ Safe Pedestrian Routes to school or Safe Routes to School

19A. Describe any other efforts toward reducing environmental impact, focusing on innovative or unique practices and partnerships. Many if not most of our instructional space can rely on natural light while in use. Our auxiliary gym seldom uses electric light during the school day.

Pillar 2: Improve the health and wellness of students and staff (30%)

Element 2A: Environmental Health

1B. What is the volume of your annual pesticide use (gal/student/year)? Describe efforts to reduce use: Under the Healthy Schools Act of 2010, an Integrated Pest Management (IPM) program was implemented in the DC public schools. IPM is a scientific and ecologically-based approach to pest management. IPM requires behavioral changes of all building occupants. Pest management evolves from pest control to pest prevention (such as visual inspections and monitoring traps). Pesticides are used only as a last resort to suppress verified pest problems, and only after consideration of all other nonchemical control options. Since the implementation of the IPM in 2011 pesticides have been marginalized. IPM service and monitoring is scheduled for Every 4th Wednesday excluding emergencies.

2B. Which of the following practices does your school employ to minimize exposure to hazardous contaminants? Provide specific examples of actions taken for each checked practice.

☒ Our school prohibits smoking on campus and in public school buses.

No Smoking Policy remains under review by DCPS. DGS submitted the policy during spring 2012.

☒ Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school.

Mercury is present in small amounts in many of the different lamps presently used throughout Wilson High. Wilson High does participate in the OSH Bulb Recapture Program, which helps eliminate the building occupants from the potential risk of mercury exposure. A yearly amount of this universal waste is reported to EPA/ DDOE.

☒ Our school uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO)

Fuel burning appliances are used in the main kitchen area. The occupants are safe guarded by the use of exhaust hood technology, as well as, large air handler capabilities to supply fresh air throughout the entire structure. Mechanical equipment supplying fresh air are routinely inspected and serviced upon need. The main Mechanical Rooms/ Boiler Room and rooftop equipment have appropriate sized and timed motors digitally synched with on-site software. Venting equipment can remove and/or add outside air.

☒ Our school has tested all frequently occupied rooms at or below ground level for radon gas and has fixed and retested all rooms with levels that tested at or above 4 pCi/L OR our school was built with radon resistant construction features and tested to confirm levels below 4 pCi/L.

Radon test levels for pre-Renovated Wilson High School have historically tested below the EPA limit of 4 pCi/L. Due to Wilson High schools physical location within Washington, DC, future OSH testing will systematically confirm that these levels hold true. If construction planning records reveal radon resistant construction features were implemented then testing plans for 2013 will be set aside and considered for future.

☐ Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure. Wilson HS does not have a playground

3B. Describe how your school manages chemicals routinely used in the school to minimize student and staff exposure. There are two sources of chemicals on the Wilson campus – custodial supplies and science classrooms. Both sources are under lock and key and access is limited to appropriate adult staff.

4B. Describe actions your school takes to prevent exposure to asthma triggers in and around the school. The 2011 school modernization rid the school campus of 75 years of allergens and dust. The 7 building campus is climate controlled year-round and eliminates the need to open windows during high pollen seasons.

5B. Describe actions your school takes to control moisture from leaks, condensation, and excess humidity and promptly cleanup mold or removes moldy materials when it is found. Modernization has virtually eliminated leaks, condensation and excess humidity. Any new leaks are subject to multiyear maintenance contract with the general contractor.

6B. Our school has installed local exhaust systems for major airborne contaminant sources. ☒ Yes
☐ No

7B. Describe your school's practices for inspecting and maintaining the building's ventilation system and all unit ventilators to ensure they are clean and operating properly.

The Building Engineer routinely clears exterior intakes of pest, pest excrement, and pest harboring material. Rooftop mechanical equipment is serviced on a three month servicing cycle. Filters are switched out at this time. Supply ducts and return grills at the classroom are wiped clean and sanitized on an as needed basis. Routine visual inspections by the Building Engineer and the Office of Safety and Health determine whether system filters remain effective or should be renewed.

8B. Describe actions your school takes to ensure that all classrooms and other spaces are adequately ventilated with outside air, consistent with state or local codes, or national ventilation standards. We comply with all applicable ventilation standards.

9B. Describe other steps your school takes to protect indoor environmental quality such as implementing EPA IAQ Tools for Schools and/or conducting other periodic, comprehensive inspections of the school facility to identify environmental health and safety issues and take corrective action. None in place at this time.

Element 2B: Nutrition and Fitness

10B. Which practice/s does your school employ to promote nutrition, physical activity and overall school health? Provide specific examples of actions taken for each checked practice, focusing on innovative or unique practices and partnerships. (100 word max each)

We have a Wellness Council that meets monthly to discuss school health and wellness issues. Our Wellness Council is working in collaboration with Alliance for a Healthier Generation's Healthy Schools Program to effectively identify and address health issues of most concern for our school community. Currently, our wellness council is comprised of the HealthCorps program coordinator, school nurse, New Heights program coordinator, several administrators, teachers, and students.

Our school participates in the USDA's HealthierUS School Challenge. X Yes ☐ No

Level and year: Alliance for a Healthier Generation – Bronze Level Candidate

Our school participates in the following Farm to School programs:

X Strawberry and Salad Greens; most recent year: 2011-12

☐ DC Farm to School Week; most recent year: _____

☐ DC School Garden Week; most recent year: _____

X Growing Healthy Schools Week 2012

Please describe how you participated in these weeks: Promoted fruits and vegetables and our 25 item salad bar.

☐ Our school has offered students a lunch menu that meets the HUSSC gold level menu criteria over the past school year (check yes if you received HSA lunch meal reimbursements)

n/a Our school garden supplies food for our students through a cooking or garden class or to the community

X Our students spent age appropriate physical education (PE) in which 50% of each class included structured physical activity

Please specify the total number of PE minutes per week that your students received over the past year 225 minutes/week. (9th & 10th graders only) Upper classmen participate in 33 sports.

X At least 50% of our students' annual physical education takes place outdoors.

X Health measures are integrated into assessment.

☐ At least 50% of our students have participated in the EPA's Sunwise (or equivalent program).

X Food purchased by our school is locally grown, locally processed, and unprocessed from growers engaged in sustainable agriculture practice as defined in the Healthy Schools Act.

Percentage: 80% Type: Fruits and vegetables

11B. Describe the type of outdoor education, exercise and recreation available.

Our campus is really a community resource that operates 7 days a week from 7:00 am – 9:00 pm with these hours bookended by a wide variety of sports and athletic activities. We also host a crew team, an ice hockey team, cross country, ski team and golf team that practice and compete off site. We have 33 freshman, junior varsity and varsity sports and they practice on campus and neighboring fields. Night lights allow for 12 month access to our turf stadium field. We partner with the DC Department of Parks and Recreation on a Natatorium that is available to the general public from 6:00 am – 9:00 pm daily. One third of our power plant was retrofitted as a state of the art fitness center.

12B. Describe any other efforts to improve nutrition and fitness, highlighting innovative or unique practices and partnerships.

- HealthCorps--We have a full time HealthCorps program coordinator on site who provides a wide variety of health and wellness activities, including: 10 weekly in-class health workshops which cover mental resiliency, nutrition, and physical fitness; weekly culinary classes with

SPED students; weekly dance club; monthly healthy cooking class; 5-week Staff Wellness Challenge; School-wide Health Fair; Student wellness challenge (in the spring); monthly healthy cafeteria demonstrations; staff and student exercise classes; student mentorship; MLK Day of Service opportunities; Teen Battle Chef Culinary Challenge (see attachment for more details)

- George Washington University Interns—We host interns from GWU assisting our 2 school psychologists and 3 social workers with counseling. They provide clinical evaluations of students' social, emotional and behavioral well being.
- Latin American Youth Center: We have an on site partnership with LAYC, providing a wide range of after school and weekend support services, e.g. substance abuse, HIV/AIDS, academic tutoring, parent involvement sessions and leadership and community service initiatives.
- New Heights- We have an on site partnership with the New Heights Teen parents program, which offers support and a range of services to teen mothers and fathers.
- We also have partnerships with Teens Run DC, Metro Teen AIDS, Gay, Lesbian, Bisexual and Transgender clubs, Roving Leaders, Young Men's Collaborative, the Mary Center and local support collaboratives that are neighborhood based.

Pillar 3: Effective Environmental and Sustainability Education

1C. Which practices does your school employ to help ensure effective environmental and sustainability education? Provide specific examples of actions taken for each checked practice, highlighting innovative or unique practices and partnerships.

X Environmental and sustainability concepts are integrated throughout the curriculum. Describe

In the 2011-2012 school year, 418 students were enrolled in "Sustainable Earth." This year (2012-2013), 243 students are enrolled in this course. These 661 students represent all subgroups of Wilson's population. This yearlong course provides students with an understanding of environmental science fundamentals. Students learn about Earth's systems, environmental challenges facing these systems, and examine the issue of sustainability.

In addition, 94 students are enrolled in AP Environmental Science this year.

A green team of scholars, faculty, and parents – along with outside guidance and counsel – designed a Green LEEDers Tour guidebook of our modernized campus (see attached sample). To date, over 6,000 DC residents and guests from around the world have toured our seven building, 11 acre campus. The tour emphasizes the latest in green design, environmental sustainability, technology, and regional stewardship. All environmental science classes have taken part in these tours and 36 students have been trained to be tour LEEDers.

X Environmental and sustainability concepts are integrated into assessments. Describe (50 word max)

Environmental and sustainability concepts are the foundation of Sustainable Earth and AP Environmental Science content. Assessments revisit similar themes throughout the year: sustainability, tragedy of the commons, presence of finite resources (particularly water, minerals, fossil fuels, nutrients, top soil), and the idea that human and environmental health is inextricably linked.

X Professional development in environmental and sustainability education is provided to teachers. Describe (50 word max)

One teacher was supported in taking American Meteorological Society's DataStreme Climate course (3 graduate credits).

Two teachers attended WWF's Eco Schools Workshop on Climate Change.

Two teachers and two students attended the Goldman Prize Ceremony at the Natural History Museum (this ceremony awards environmentalists from around the world).

2C. For schools serving grades 9-12, provide:

1. Percentage of last year's eligible graduates who completed the AP Environmental Science course during their high school career: 6% Percentage scoring a 3 or higher: 50%

2. How does your school use sustainability and the environment as a context for learning subjects such as: science, technology, engineering, mathematics while preparing them for green careers using green technologies?

a. Project Lead the Way (PLTW)– Civil Engineering and Architecture classes are designing a green building with a green roof. It is a renovation of an abandoned warehouse which is a brownfield site . It will be converted into a community library.

b. PLTW - BioMedicine classes address biological hazardous waste disposal through project based enactments.

c. PLTW- Principles of Engineering and Engineering Design and Development classes will design, build and program a material sorter for recycling that separates wood, paper, metal and glass waste.

EDD Students will design, build and program a solar powered cell phone charger that is augmented by mirrors.

3C. Describe students' civic/community engagement projects integrating environment and sustainability topics.

- **Do One Thing Project:** Students at Wilson High School collaborated with students from Pennsylvania and Japan to create a photomosaic mural. This project was born out of Fulbright Japan's *2011 Japan – U.S. Teacher Exchange Program for Education for Sustainable Development*, in which one of Wilson's environmental science teachers participated. The mural represents individual actions to live in a more sustainable way that were taken by close to 675 students. Every 2011-2012 Sustainable Earth student and teacher at Wilson High School (in addition to students and teachers at three other schools) committed to do one thing to be more mindful of the use of our natural resources for six weeks. They documented their experiences on a daily basis, represented their actions artistically, and wrote reflective papers at the conclusion of the six-week period. The "Do One Thing" project reminded students and teachers that it is our individual responsibility to do the best we can. Individual actions have ripple effects and collectively can make a big impact.
- **Youth Led Action Research (YLAR)** To inspire and empower students to take charge of an issue that they feel passionate about; To build leadership skills in students. Every two years, HealthCorps leads a group of students to complete a YLAR project. Last year's project was increasing school recycling.

4C. Describe your students' meaningful outdoor learning experiences. (100 word max)

- **Wilson's First Annual Anacostia Beach Cleanup:** NEMO, NOAA sponsored marine science club, and the Anacostia Watershed Society are teaming up to offer two days of community service beach cleanup. Prior to attending the cleanup, participating students will be required to attend a 45-minute presentation on the Chesapeake Bay Watershed and the importance of environmental activism in support of clean water and healthy habitat in the watershed.
- **Pollinating Garden** – In partnership with The Nature Conservancy we are creating a pollinating garden on the remains of a fallen tree's root system. A variety of lessons will be taught through this garden project.
- **Seedlings to School Gardens Project** – Our EPA granted EcoLab Green House grows seedlings for elementary and middle school community gardens.

- Recycling/Composting -

5C. Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills.

Wilson High School is unique in that it is the only district school to offer a career education program in environmental science. The sequence of courses is: Environmental Science, Sustainable Earth; Marine Sciences, Sustainable Oceans; Urban Ecology, Sustainable Cities and a capstone course requiring students to complete an independent research project or internship involving an aspect of environmental science of interest to the student. The Environmental Science, Sustainable Earth, course was rolled out in fall 2011, with Marine Sciences class beginning in fall 2012. Urban Ecology is slated to begin in fall 2013. The course was piloted for two years and was very popular with enrollment increasing from a single section to four sections the following year. Students in the Urban Ecology class completed projects that included organizing neighborhood cleanup activities, completing neighborhood open space and tree surveys; working with elementary students on school site environmental projects, performing school site energy audits and designing climate change projects that were presented to Congress. Students also studied EPA designated Brownfields site in the District of Columbia and created power point presentations on possible strategies for land revitalization.

6C. Describe your partnership(s) to help your school and other schools achieve in the 3 Pillars.

Partner Organization: DC Greens Scope of Partnership: Growing seedlings for DC school gardens. The Wilson Greenhouse has been used to grow and distribute seedlings for nearby school gardens. This program is expanding this year.

Partner Organization: City Blossoms Scope of Partnership: Working with scholars to create a pollinator garden

Partner Organizations: US Green Building Council Scope of Partnership Designed Student-Lead Green Building Tour

Partner Organization: Architecture Constructions and Engineering Scope of Partnership: Mentoring Program Science Math Technology Program

Chesapeake Bay Foundation

Anacostia Watershed Society: Approximately 50 students took part in a service learning program where environmental educators engaged students about the Watersheds of Washington DC . This

resulted in a tree planting as a restoration site along the Anacostia River. This partnership will be continuing this spring .

7C. Describe any other ways that your school integrates core environment, sustainability, STEM, green technology and civics into curricula to provide effective environmental and sustainability education, highlighting on innovative or unique practices and partnerships. (Maximum 200 words)

The environmental science team has hosted a variety of speakers and events:

- Dr. Mae Jemison (former NASA astronaut among other things): Twenty-five students participated in a one-day workshop led by Dr. Mae Jemison. Over the course of the day student groups were presented with local environmental issues, researched the problems and potential solutions, and then presented their proposals to the larger group. This workshop ran in conjunction with World Environment Day, which was also being held at Wilson High School.
- Marc Humphries (Energy Policy Specialist and Mineral Economist for the Library of Congress): Approximately 150 students participated in Marc's 1.5 hour "mini to macro" seminar on mineral resources. They were divided into different interest groups, were educated on their respective groups' point of view, and shared out to the larger group.
- Alliance for Climate Education Presentation on Climate Change: Approximately 800 students attended this 1.5 hour event.

8C Submit up to 8 photos or up to 3 minutes of video content that capture how the three pillars are implemented at your school.

Appendix

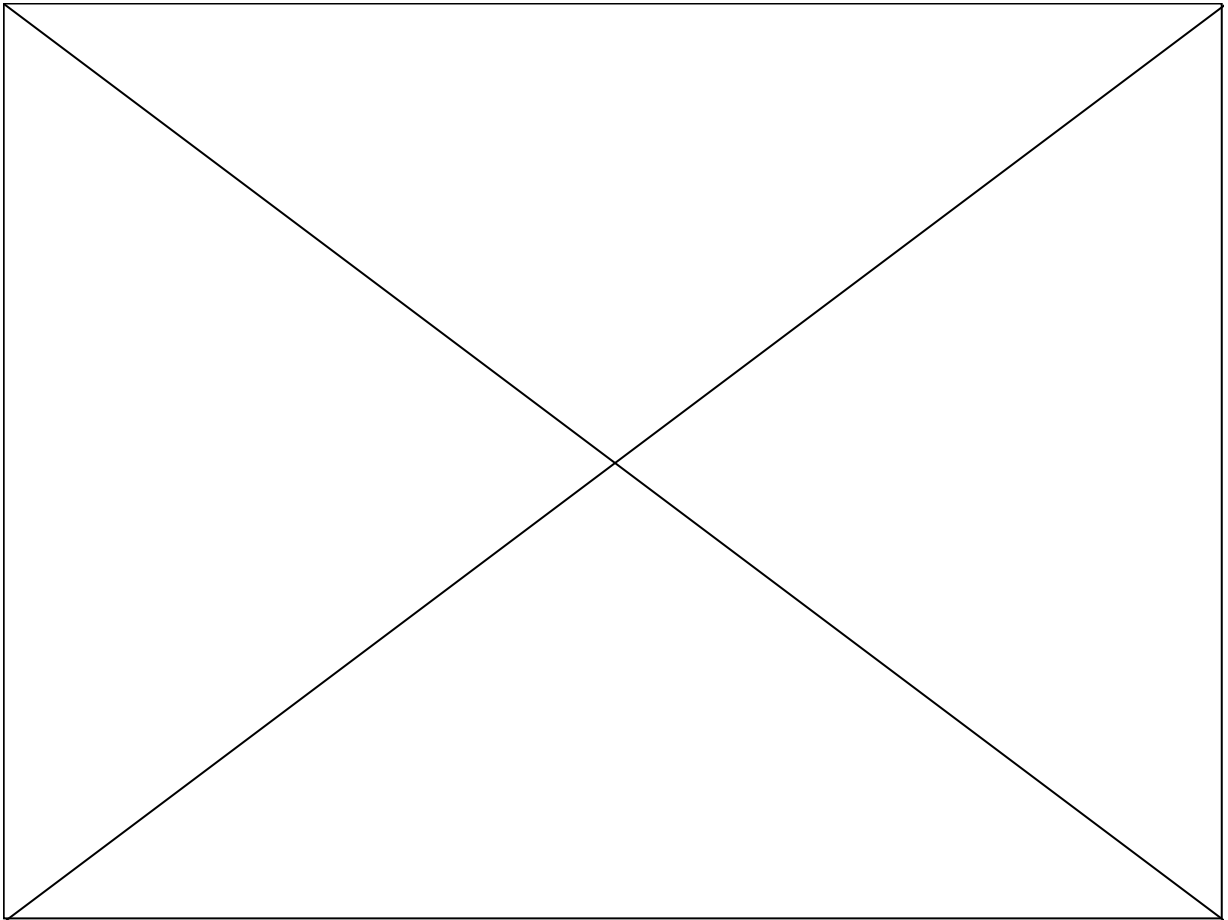




Wilson High School leads green movement at local schools

By Alison Starling

December 20, 2011 - 04:31 pm



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With solar panels, green roofing and an eco-lab, the newly renovated Wilson High School is leading D.C. schools in energy efficiency and going green.



The school also changed its curriculum by adding more classes focused on the environment.

“Definitely environmentalism and sustainable growth and sustainable use of resources are something these kids care about,” says Alex Wilson, director of academic development.

The new federal green ribbon schools program is aimed at honoring schools that are creating greener, more cost-effective and healthier school environments.

To be eligible to win, schools must meet three criteria: First -- are students learning about the environment and sustainability? Second -- is the school a healthy environment? And finally -- is the building energy-efficient and green?

At Sandy Spring Friends School in Montgomery County, environmental stewardship is a big focus. They compost all their lunchtime leftovers and this

“We have been doing this approximately eight years,” says Laura Miyoshi, director of operations. “When we initiated the program, we reduced our trash output by 40 percent.”

This spring, students will grow food on a new school farm which will then be served in the cafeteria.

Students say they're excited about helping the environment and that this green ribbon program is inspiring.

“It gives us encouragement to keep doing other things and new projects,” says 11th grader Gilliam Kramer.

Short URL: <http://wj.la/vNSJnC>

Attachment 1. Energy Usage Calculations

Past 12 months of gas and electricity usage

| Month | Gas use (Therms) | Electricity Use (KWh) | Total (MBTU) |
|-------------------|------------------|-----------------------|---------------|
| Oct-11 | 10,539 | 458,846 | 2,620 |
| Nov-11 | 20,511 | 443,350 | 3,564 |
| Dec-11 | 27,074 | 458,128 | 4,271 |
| Jan-12 | 40,035 | 456,966 | 5,563 |
| Feb-12 | 30,902 | 427,343 | 4,548 |
| Mar-12 | 19,260 | 427,279 | 3,384 |
| Apr-12 | 13,672 | 238,484 | 2,181 |
| May-12 | 865 | 548,364 | 1,958 |
| Jun-12 | 2,663 | 557,764 | 2,169 |
| Jul-12 | 2,204 | 346,696 | 1,403 |
| Aug-12 | 1,469 | 541,928 | 1,996 |
| Sep-12 | 33 | 471,375 | 1,612 |
| Total FY12 | 169,227 | 5,376,523 | 35,268 |

Source: DC Department of General Services

| Fiscal Year | Gas use (therms) | Electricity use (KWh) | Total energy use (MBTU) | Energy use per student (kBTU/student) | Energy intensity (kBTU/sq ft) |
|-------------|------------------|-----------------------|-------------------------|---------------------------------------|-------------------------------|
| FY12 | 169,229 | 5,376,523 | 35,268 | 21,440 | 93.67 |
| FY11 | 3,083 | 777,968 | 2,963 | 1,801 | 7.87 |
| FY10 | 162,194 | 1,233,027 | 20,427 | 13,290 | 75.29 |
| FY9 | 186,183 | 1,808,049 | 24,788 | 16,127 | 91.37 |

Source: DC Department of General Services 2013.

| Calculation | Unit | Value |
|---------------------------------------|--------------|--------|
| Average Baseline Energy Use (FY09-10) | MBTU | 22,607 |
| Average Baseline Energy Use (FY09-10) | kBTU/student | 14,709 |
| Average Baseline Energy Use (FY09-10) | kBTU/sq ft | 83 |
| Current energy use (FY12) | MBTU | 35,268 |
| Current energy use (FY12) | kBTU/student | 21,440 |
| Current energy use (FY12) | kBTU/sq ft | 94 |
| % change MBTU | % | 56% |
| % change kBTU/student | % | 46% |
| % change kBTU/sq ft | % | 11% |

Note: Calculated using occupant and building data provided in Attachment 3; and 271,300 sq ft in FY09 and 10 and 376,507 sq ft in FY12. Also there are a few known discrepancies with the data which when corrected will slightly raise FY11 and FY12 energy usage.

Attachment 2. Water Usage Calculations

Water Use Data

| Year | Water use (ccf) | Water use (gallons) | Water use per occupant (gallons/occupant) | Water use per sq ft (gallons/sq ft) |
|------|-----------------|---------------------|---|-------------------------------------|
| FY12 | 1,839 | 13,756 | 7 | 0.04 |
| FY11 | 883 | 6,605 | 4 | 0.02 |
| FY10 | 6,831 | 51,096 | 30 | 0.14 |
| FY9 | 6,209 | 46,443 | 27 | 0.12 |

Source: DC Department of General Services 2013

Water Use Calculations

| Calculation | Unit | Value |
|---------------------------|------------------|-------|
| Average baseline (FY9,10) | gallons/occupant | 29 |
| Current (FY12) | gallons/occupant | 7 |
| % change | % | -74% |

Note: Calculated using occupant data provided in Table 3b;